



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,430	11/14/2003	Craig Hansen	43876-148	9134
20277 7590 05/02/2007 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			EXAMINER COLEMAN, ERIC	
			ART UNIT 2183	PAPER NUMBER
			MAIL DATE 05/02/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/712,430	Applicant(s) HANSEN ET AL.	
	Examiner Eric Coleman	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 and 40-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-26 and 55-69 is/are allowed.
- 6) ☒ Claim(s) 1-13 and 40-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Double Patenting***

1. Claims 1-13,40-54 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-13 and 26-34 of copending Application No. 10/705946. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

2. The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, this rejection is maintained as set forth in the last office action.

3. The terminal disclaimer filed in response to the outstanding double patenting rejection was not signed by an attorney that is officially an attorney of record in the instant case at the Patent and Trademark office.

4. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

5. As to the prior art rejections, reasons for allowance over the prior art of record are presented below:

6. The following is an examiner's statement of reasons for allowance over the prior art of record: After further review The Examiner deems that the features in the

independent claims in the instant application were not taught by the art cited in the last office action. The Van Hook reference taught the selective transfer of data from partitions in one or more source registers to selected partitions in a destination register and concatenating the results in the destination register. This effectively includes a shift of plural partitions of data by predetermined distance, which would have been the width of the partition, where each partition was the same width. This would have also included the storing of a sign bit (ones or zeros) in an adjacent partition to the partition that stored a shifted portion of data such as for changing the size of floating point data. Motorola taught shift field but did provide the functionality as now claimed in the instant application as follows: Claims 1 in the instant application include that one instruction specifying the shift amount and register the number of data elements in the first plurality of data elements being inversely related to the elemental width, the register containing a first plurality of data elements having an elemental width smaller than the register width, the shift amount configurable to a amount inclusively between zero and one less than the elemental data width the execution unit operable to shift a subfield of each of the plurality of data elements by a shift amount to produce a second plurality of data elements and provide the second plurality of data elements as a concatenated result. . This features along the other features in the claim was not found in the prior art. The variation to this feature in independent claim 14 was not found in the prior art. Independent Claims 40, 45, contain the feature of group shift instruction specifying a shift amount, a register containing a plurality of equal sized data elements stored in partitioned fields and a shifting a subfield of a data element by the shift amount and

filling the (most in claim 40 and least in claim 45) significant bits with the (sign bit in claim 40 and zeros in claim 45) of the respective data element to produce a second plurality of equal-sized data elements and providing the second plurality of data elements as a concatenated result to the destination register. This combination of features was not found in the prior art. The variation to this combination of features in claims 50,55,60 and 65 also was not found in the prior art.

7. Note: As to the applicants arguments that the ' 840 patent and appendices to the linked to the instant application by continuation in part The Examiner has reviewed the patent and appendix argued by the applicant. The Examiner contends that the 840 patent with appendix provide for shift of data stored in registers that are partitioned in plural partitions where the number of partitions and the size of the partitions are variable. However the instruction described in the '840 patent and appendix does not provide for the selective shift amount. Therefore a single group shift instruction would shift one or more data elements by a fixed amount that could not be changed by the instruction. One of ordinary skill could have used plurality of the shift instructions such as in a loop to effect the number of shifted bits but this does not support group shift by one of plurality of different shift amounts by configuring a single instruction.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Coleman whose telephone number is (571) 272-4163. The examiner can normally be reached on Monday-Thursday.

Art Unit: 2183

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EC



**ERIC COLEMAN**  
**PRIMARY EXAMINER**